

# ALTERNATIVES TECHNICAL MEMORANDUM

New Haven – Hartford – Springfield  
Commuter Rail Implementation Study



August 2004

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# 1

## Chapter

## Introduction

The Connecticut Department of Transportation (ConnDOT) is currently studying the feasibility of implementing commuter rail service between New Haven, Hartford and Springfield. A previous report produced for this study evaluated the existing conditions in the corridor. The purpose of this report is to evaluate different alternative elements of a commuter rail system.

### 1.1 Elements of a Commuter Rail System

The various alternatives that will be described and evaluated in the chapters that follow will be studied for the following elements:

**Service hours and frequency:** The hours and frequency of commuter rail service will vary between alternatives. Some alternatives will include service in peak commuter hours only while others will include all day service and even weekend service.

**Station locations:** The number and placement of commuter rail stations will vary between alternatives.

**Construction cost:** The cost to build infrastructure needed by the commuter rail system (primarily in the form of parking and new track, but also potential grade crossing improvements, new stations, etc) will vary by alternative based upon the needs to provide varying service for different hours and different station locations.

**Ridership:** Numbers of passengers using the commuter rail system will vary by alternative based upon the needs to provide varying service for different hours and different station locations.

**Operating cost:** The annual cost to operate the commuter rail system will also vary by alternative for differing levels of service.

**Maintenance Facility:** A new maintenance facility will be needed for New Haven – Hartford – Springfield commuter rail service and the size and cost of this facility would vary based upon operational needs.



**Airport Connections:** It is anticipated that all the alternatives will serve Bradley International Airport in some capacity. The type of service (shuttle versus rail connection) and the location of such a connection could vary among alternatives.

## 1.2 Alternatives Evaluated in this Report

Subsequent chapters of this report consider:

- A “Minimum Build” Alternative (Chapter 2)
- A “Maximum Build” Alternative (Chapter 3)
- Service Plan for the “Maximum Build” Alternative (Chapter 4)
- Environmental Assessment for the “Maximum Build” Alternative (Chapter 5)
- Implementation Alternatives (Chapter 6)

The minimum and maximum build were designed to provide the two extremes in possible service on the line. Using the data from these two initial alternatives, a set of four possible implementation alternatives were created for initial startup of the service along with a menu of additional options that could be added either immediately or over time.